
```
$Id: lab0-intro-unix.mm,v 1.14 2019-02-26 14:16:33-08 - - $  
PWD: /afs/cats.ucsc.edu/courses/cms104a-wm/Assignments/lab0-intro-unix  
URL: http://www2.ucsc.edu/courses/cms104a-wm/:/Assignments/lab0-intro-unix/
```

It is assumed that everyone in class is familiar with Unix (Linux), the UCSC **submit** command, and using **Makefiles**.

TAs should review the use of the Linux command line for those few students who might not be familiar with it. All programming projects in this course will be done on the **unix.ucsc.edu** servers or the workstations in BE/105.

Most students will, of course, develop on their own computers. However, the production environment will be the Linux servers, and all code must run there.

Use of the **submit** command: All programs will be submitted via **submit** on the campus Linux hosts:

```
submit cms104a-wm.s19 lab0 files...
```

Substitute for **lab0** the names of later assignments.

Accessing the command line from home.

```
ssh -X username@unix.ucsc.edu
```

The option **-X** works if you are doing X11 forwarding.

Using **make**: Write a simple program in C++ using several modules, header files, and separate compilation. Write a **Makefile** that can build it.

Submit the source code and **Makefile** as **lab0**.

While we will be using C++ in this course, all students are expected to know C (prerequisite), and may use their own discretion as to how much of C++ to use and how much just to code in C.

Simplified, source code files should have the suffices **.h** or **.cpp**, and we use **g++** to compile source code. It is recommended that the containers from the standard library be used instead of coding containers yourself.

This lab will not be graded. There is no credit for it. If the above interaction with Linux is not completely obvious, attend the first couple of labs to be brought up to speed by the TA.

See the **code/** subdirectory for the solution to this lab and a sample of how to mix **flex**, **bison**, and C++.